

REMARKS/ARGUMENTS

This is a reply to the Office Action dated April 5, 2007.

Status of Claims

Claims 1-6 and 8-16 are currently pending in this application. Claim 7 has been canceled. New Claims 8-16 have been added. Claims 1-6 are currently amended.

Amendments Discussion

Claim 1 and 4 have been amended to clarify that the nonwoven anti-microbial wipe is a *single-use* wipe (e.g., page 1, lines 24-29; page 3, lines 2-4), and that the anionic antimicrobial agent is selected from dual quaternary ammonia anti-microbial agent, potassium iodide, and sodium hypochloride (e.g., page 3, lines 21-22; page 6, lines 23-27). Claims 2, 3, 5 and 6 have been amended to be consistent with the language introduced in the respective parent claims. New claims 8, 9, 12, 13 and 14 reciting a particular anti-microbial agent amongst those listed in the preceding sentence have the same support in that respect as their respective parent claim 1 or 4. New claims 10, 11, 15 and 16 recite further details of the fibrous nonwoven substrate (e.g., page 4, lines 9-15; page 5, lines 22-24). No new matter has been introduced.

Interview Summary

The applicants' acknowledge with appreciation the courtesy of the telephonic interview granted by the Examiner to the applicants' undersigned representative on July 31, 2007. No agreement was reached at that time as to the allowability of any particular claim. There was discussion that the Radwanski reference (U.S. 6,734,157) relates to *re-usable* wipes, including the background art discussions included in that reference, that require controlled release of the anti-microbial so that the wipe can be washed, rinsed and re-used many times. The applicants' representative noted that the present invention is directed to a wipe that readily releases anti-microbial agent from the wipe upon introduction of water, which is accomplished by providing anionic antimicrobial agent in combination with anionic binder. The Examiner suggested that the applicants consider amending the claims to clarify that the claimed invention concerns "disposable single use" wipes to clarify that difference with Radwanski. The Examiner also clarified that the applicants should distinguish on the merits U.S. patent no. 6,716,805 and U.S. application no. 10/737,129 cited under obviousness type double patenting rejections in the office action.

Obviousness Double Patenting Rejections

Claims 1-7 were provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 and 8-9 of copending application no. 10/699,425.

A terminal disclaimer in compliance with 37 CFR 1.321 is being concurrently filed with the requisite fee effective to overcome this provisional rejection.

Claims 1-7 also were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Pat. No. 6,716,805, and provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Application No. 10/737129.

Based on US PTO records, U.S. Application No. 10/737129 has issued as U.S. Pat. No. 6,936,580, which is a continuation of U.S. Pat. No. 6,716,805. Furthermore, based on the US PTO's assignment records, U.S. Pat. Nos. 6,716,805 and 6,936,580 are not currently commonly assigned with the present application.

U.S. Pat. Nos. 6,716,805 or 6,936,580 appear to describe hard surface cleaning pre-moistened wipes, which may include a quaternary ammonium salt, amongst other options, as an antimicrobial active (see, e.g., U.S. Pat. No. 6,936,580: claim 1). However, these patents do not teach use of anionic anti-microbial agent in combination with an anionic binder in the same wipe. U.S. Pat. Nos. 6,716,805 or 6,936,580 teach use of *cationic* materials for the hydrophilic polymer component to provide substantivity and hydrophilicity (see, e.g., U.S. Pat. No. 6,936,580: col. 6, lines 24-30; col. 9, lines 23-27). U.S. Pat. Nos. 6,716,805 has a similar disclosure as the continuation case. The use of cationic binder polymers in U.S. Pat. Nos. 6,716,805 and 6,936,580 teaches away from the present invention.

Anticipation Rejection

Claims 1-7 have been rejected under 35 USC §102(b) as being anticipated by Radwanski et al. (U.S. Pat. No. 6,734,157).

The Office Action indicates that the Radwanski et al. reference discloses making wipes that provide controlled release antimicrobial agent. The Office Action indicates that the reference teaches an antimicrobial agent that may be applied while the fibers are being made or incorporated with the substrate or applied as a coating and adhered to the substrate layer. The Office Action references column 3 of the reference for combining the antimicrobial agents with

various polymers, binders or a combination thereof. The Office Action indicates that the substrate may be hydroentangled, and the antimicrobial agent can be of quaternary type, and that the antimicrobial agent that is applied to the substrate is activated or released upon contact with water.

The presently claimed invention is related to a *single-use* nonwoven substrate comprised of *anionic binder* or a combination of an anionic and non-ionic binder, as well as an *anionic anti-microbial agent* that is readily released upon being introduced to a water source. The anionic anti-microbial agent is selected from dual quaternary ammonia anti-microbial agent, potassium iodide, and sodium hypochloride. The single-use wipe comprised of an anionic binder or an anionic/non-ionic binder mixture has little or no affinity for an anionic disinfecting solution, and any bonds formed between the binder and disinfectant are easily broken. The resulting wipe more readily releases the disinfectant into a water source and will not attract and retain a charged disinfectant that could possibly prematurely deplete the effectiveness of a sanitizing solution. This wipe is useful, for example, as a hard surface wipe for the food service or hospitality industry, where it is advantageous to utilize a limited or single use nonwoven wipe to prevent the build up of bacteria that tends to accumulate within a standing damp sponge or terry cloth towel. The present single-use wipe avoids bacterial build-up problems, which may become associated with re-usable wipes. Further the present single-use wipes comprising anionic binder and anionic anti-microbial agent avoid problems associated with wipes containing anionic disinfectants and cationic binders that can not readily release the anti-microbial agent due to the affinity of the disinfectant for cationic binders, hampering the ability of those different types of wipes to readily sanitize a surface being wiped.

As discussed during the above-summarized interview, Radwanski et al. is directed to re-usable wipes that can “remain effective after repeated washing and rinsing operations” (col. 2, lines 27-29; col. 4, lines 54-65). Radwanski et al. refer to “soluble binders” as used to “modulate the controlled release properties of the anti-microbial agent” (col. 3, lines 55-58). In fact, Radwanski et al. appears to describe use of partial acrylic and microcrystalline wax coatings for calcium hypochlorite particles where the partially coated anti-microbial agents “exhibited much slower dissolving rate” to provide a desired controlled release of coated anti-microbial agent over time (col. 12, lines 61-67; col. 13, lines 28-37). Therefore, Radwanski et al. teaches away from the present invention. Again, in the present invention an anionic anti-microbial is readily

released upon being introduced to a water source by its use in combination with an anionic binder in the nonwoven wipe so that the wipe can readily sanitize a wiped surface in a single-use.

In view of the above reasons, the applicants submit that Radwanski et al. does not anticipate, nor render obvious. the presently claimed invention.

Reconsideration and withdrawal of this rejection is respectfully requested.

It is believed that this application is in condition for allowance, and notice of such is respectfully requested.

If the Examiner believes that a teleconference would be useful in expediting the prosecution of this application, the official is kindly invited to contact the applicants' representative of record indicated below.

Respectfully submitted,

/Ramon R. Hoch/
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